

CLAIMS

1. A satellite digital audio radio multipoint distribution system comprising:
first means for providing a satellite digital audio radio signal;
second means for transforming said satellite digital audio radio signal to a converted signal;
third means for distributing said converted signal and
plural fourth means for receiving said distributed converted signal and providing plural output signals in response thereto.
2. The invention of Claim 1 wherein said first means includes a satellite antenna and a satellite receiver.
3. The invention of Claim 2 wherein said first means includes a terrestrial repeater.
4. The invention of Claim 2 wherein said satellite receiver decodes a stream of data received from a satellite and recodes said stream of data using a satellite radio terrestrial broadcast format.
5. The invention of Claim 4 wherein said format is an XM radio format.
6. The invention of Claim 5 wherein said format is multi-carrier modulation.
7. The invention of Claim 6 wherein said converted signal is an XM radio terrestrial intermediate frequency multi-carrier modulated signal.

8. The invention of Claim 1 wherein said first means is a storage medium on which satellite digital audio radio service signals have been stored.

9. The invention of Claim 8 wherein said storage medium is a digital video disc.

10. The invention of Claim 1 wherein each of said plural fourth means includes a respective user interface to allow for channel selection and audio processing.

11. The invention of Claim 1 wherein each of said plural fourth means is a satellite digital audio radio service receiver.

12. The invention of Claim 1 wherein each of said plural fourth means includes a channel decoder adapted to receive said converted signal and provide a digital bitstream output in response thereto.

13. The invention of Claim 12 wherein each of said plural fourth means further includes a source decoder digital signal processor adapted to receive said digital bitstream and provide said output signal in response thereto.

14. The invention of Claim 1 further including a distribution system for connecting said first means to each of said plural fourth means.

15. The invention of Claim 14 wherein said distribution system is a cable distribution system.

16. The invention of Claim 1 wherein said output signal is an audio output signal.

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17. A satellite digital audio radio multipoint distribution system comprising:
a satellite antenna for receiving a satellite digital audio radio signal;
a terrestrial repeater connected to set antenna for decoding said satellite signal and
recoding said signal into a satellite radio terrestrial broadcast format;
a system for distributing recoded signal, and
plural satellite digital audio radio service receivers adapted to receive said recoded
signals from said distributing system and provide audio and/or visual output signals in
response thereto.

18. The invention of Claim 17 wherein said format is an XM radio format.

19. The invention of Claim 18 wherein said format is multi-carrier modulation.

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20. The invention of Claim 19 wherein said converted signal is an XM radio
terrestrial intermediate frequency multi-carrier modulated signal.

21. The invention of Claim 17 wherein each of said plural receivers includes a
respective user interface to allow for channel selection and audio processing.

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22. The invention of Claim 17 wherein each of said plural receivers includes a
channel decoder integrated circuit adapted to receive said converted signal and provide a
digital bitstream output in response thereto.

23. The invention of Claim 22 wherein each of said plural receivers further
includes a source decoder digital signal processor adapted to receive said digital bitstream
and provide said output signal in response thereto.

24. The invention of Claim 17 wherein said distribution system is a cable distribution system.

25. The invention of Claim 17 wherein said distribution system is a wireless distribution system.

26. The invention of Claim 17 wherein said distribution system is a fiber-optic distribution system.

27. The invention of Claim 17 wherein said output signal is an audio output signal.

28. A method for distributing a satellite digital audio radio signal to multiple receivers including the steps of:

receiving a satellite digital audio radio signal and distributing a converted signal in response thereto and

receiving said distributed downconverted signal via plural receivers and providing plural output signals in response thereto.